



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: AIR-22-13

Date: May 27, 2022

SUBJ: Landing Gear Components

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts owners, operators, maintenance technicians, and inspectors of an airworthiness concern on **Sierra Hotel Aero, Inc. (type certificate formerly held by Ryan) Model Navion (L-17A), Navion A (L-17B, L-17C), Navion B, Navion D, Navion E, Navion F, Navion G, and Navion H airplanes**, specifically the importance of thoroughly inspecting the main landing gear (MLG) components during maintenance inspections.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

The FAA received a report of the MLG failing during the landing and taxi of a Model Navion B airplane. The pilot reported a "snap" noise during a "smooth and normal" landing on a dry concrete runway. The airplane taxied the entire length of the runway for the rollout until it became difficult to taxi the airplane straight. Upon exiting the aircraft, the pilot identified a failure of the left MLG. Investigations determined that the left main gear retraction link (part number (P/N) 143-33165-20) developed a fatigue failure of the weld joint of the brace middle tube to clevis-shaped fork, causing the displacement of the left MLG strut outboard to the wingtip and consequent substantial damage to the underside of the left wing.

The main gear retraction links, Navion P/N 143-33165-20, was one of the replacement options required by AD 63-21-05, effective November 1, 1963. This AD was issued to replace Navion P/N 143-33165-10 main gear retraction links with revised assembly Navion P/N 143-33165-20, Temco P/N 57001-9, or FAA-approved equivalent having the longer lap welded center section that completely covers the turned down part of the end fitting.

Recommendations

1. During each annual or 100-hour inspection, inspect the MLG in accordance with the latest revision of the applicable service or maintenance manual to ensure a thorough inspection for any developing cracks in the MLG structure, particularly the welded joints of the upper side brace assembly.

2. Report inspection findings or cracks of the MLG weld joint to the FAA contact below. Reporting is voluntary. The FAA will analyze the inspection result information received to determine further action. Include the specific airplane model, airplane serial number, MLG part number, and hours time-in-service on the airplane and the affected MLG. As part of its commitment to continued operational safety, the FAA is monitoring the Navion airplanes for issues related to landing gear weld joint fatigue cracks and requests submission of such reports to the person listed under For Further Information Contact.

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For Further Information Contact

Steven Rosenfeld, Aviation Safety Engineer and Program Manager, Chicago ACO Branch, FAA, 2300 E. Devon Avenue, Des Plaines, IL 60018; phone: (847) 294-7030; email: steven.rosenfeld@faa.gov.

For Related Service Information Contact

Sierra Hotel Aero, Inc., 1690 Aeronca Lane, Fleming Field KSGS, South St. Paul, MN 55075; phone: (651) 306-1456; email: chris@navion.com.